

Nevada Division of Environmental Protection Bureau of Air Pollution Control Calendar Year 2012 Actual Production/Emission Reporting Spreadsheet for Mercury Emissions from the Precious Metals Mining Industry Cumulative Nevada Mercury Control Program (NMCP): Mercury Operating Permit To Construct (MOPTC) Data Submittals								
Pollutant ID	Production/Heat Rate	Production Units (eg. tons/yr)	Emissions Factor Units	Emissions Factor Units	HG Annual Emissions (lbs/yr)	Hours Operated	HG Co-Product (tons/yr)	Notes
Source: Newmont Mining Corporation - Twin Creeks Mine: AQOP AP1041-0723.01; MOPTC AP1041-2218								
System Description: Juniper Mill Electric Induction Furnace (S2.001/TU4.001 - 1 of 2, only one operates at a time)								
Hg	51.38	tpy	0.00002167	lbs/hr	0.0147	676	0.0000	Induction Furnace emissions factor derived from 2012 M29 stack test.
System Description: Juniper Mill Electric Induction Furnace (S2.001.1/TU4.002 - 1 of 2, only one operates at a time)								
Hg	49.69	tpy	0.00000767	lbs/hr	0.0054	698	0.0000	Induction Furnace emissions factor derived from 2012 M29 stack test.
System Description: Juniper Mill Carbon Kiln (S2.002/TU4.003)								
Hg	5,031.80	tpy	0.0004548	lbs/hr	3.5172	7,734	0.0200	Carbon Kiln emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retort Circuit A (S2.004/TU4.004)								
Hg	15.95	tpy	0.00000002	lbs/hr	0.0000	2,271	1.8450	Retort A emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retort Circuit B (S2.005/TU4.005)								
Hg	25.69	tpy	0.00000023	lbs/hr	0.0007	3,225	2.7880	Retort B emissions factor derived from 2012 M29 stack test.
System Description: Sage Mill Autoclave (S2.023/TU4.014)								
Hg	1,942,935.00	tpy	0.04994	lbs/hr	396.0242	7,930	0.0000	Autoclave #1 emissions factor derived from 2012 M29 stack test.
System Description: Sage Mill Autoclave (S2.024/TU4.015)								
Hg	1,882,304.00	tpy	0.02993	lbs/hr	240.0685	8,021	0.0000	Autoclave #2 emissions factor derived from 2012 M29 stack test.
System Description: Electro-winning Cells (TU4.011 - six cells ducted to common stack)								
Hg	85.20	MMgals/yr	0.0007913	lbs/hr	6.9508	8,784	0.0000	Electro-winning Cells emissions factor derived from 2012 M29 stack test.
System Description: Juniper Mill Pregnant & Barren Strip Solution Tanks (TU4.008 - TU4.010)								
Hg	85.20	MMgals/yr	0.005083	lbs/hr	44.6491	8,784	0.0000	Preg./Barren Tanks emissions factor derived from 2012 M29 stack test.
System Description: Pinon Mill Pregnant & Barren Strip Solution Tanks (TU4.012 & TU4.013)								
Hg	125.74	MMgals/yr	0.0000048	lbs/hr	0.0224	4,675	0.0000	Preg./Barren Tanks emissions factor derived from 2012 M29 stack test.
System Description: Laboratory Sample Prep. Room, Fire Assay Room, Wet Lab Room, Slurry Prep. Room, LECO Room, Instrumentation Room, Met Lab Room & Autoclave Room								
Hg					3.9471		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total: 434.3715		8.9100	CY2006 Co-product: 17,820 lbs/yr
					CY2007 Facility Total: 929.9303		13.2160	CY2007 Co-product: 26,432 lbs/yr.
					CY2008 Facility Total: 1,679.1864		8.8000	CY2008 Co-product: 17,600 lbs/yr.
					CY2009 Facility Total: 425.7559		5.9080	CY2009 Co-product: 11,816 lbs/yr.
					CY2010 Facility Total: 178.8392		5.4670	CY2010 Co-product: 10,934 lbs/yr.
					CY2011 Facility Total: 452.1731		3.9940	CY2011 Co-product: 7,988.00 lbs/yr.
					CY2012 Facility Total: 695.2002		4.6530	CY2012 Co-product: 9,308.20 lbs/yr.
Source: Queenstake Resources USA, Inc. - Jerritt Canyon Mine: AQOP AP1041-0778; MOPTC AP1041-2217								
System Description: West Roaster Process (S2.036 & PF1.213/TU4.001)								
Hg	480,290.00	tpy	0.000761	lbs/hr	4.6276	6,081	0.0000	Roaster emissions factor derived from average of 2012 M29 stack tests.
System Description: East Roaster Process (S2.041 & PF1.214/TU4.002)								
Hg	456,214.00	tpy	0.001721	lbs/hr	10.3484	6,013	0.0000	Roaster emissions factor derived from average of 2012 M29 stack tests.
System Description: Ore Dryer (S2.026/TU4.003)								
Hg	619,989.00	tpy	0.0000562	lbs/hr	0.2882	5,129	0.0000	Ore Dryer emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retort (S2.051/TU4.004)								
Hg	15.00	tpy	0.00000135	lbs/hr	0.0039	2,904	1.5200	Retort emissions factor derived from 2012 M29 stack test.
System Description: Refining Process Induction Furnace (S2.050/TU4.005)								
Hg	15.00	tpy	0.0106	lbs/hr	12.4550	1,175	0.0000	Furnace emissions factor derived from 2012 M29 stack test.
System Description: Laboratory Units Including Large Ore Drying Ovens (5 Units) and Electro-winning Cells								
Hg					2.1363		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total: 293.9245		2.9600	CY2006 Co-product: 5,920 lbs/yr.
					CY2007 Facility Total: 1,966.3934		1.0200	CY2007 Co-product: 2,040 lbs/yr.
					CY2008 Facility Total: 219.9723		0.7100	CY2008 Co-product: 1,420 lbs/yr.
					CY2009 Facility Total: 138.9704		2.1000	CY2009 Co-product: 4,200 lbs/yr.
					CY2010 Facility Total: 34.9527		11.0380	CY2010 Co-product: 22,076 lbs/yr.
					CY2011 Facility Total: 69.8714		0.0000	CY2011 Co-product: 0.00 lbs/yr.
					CY2012 Facility Total: 29.8595		1.5200	CY2012 Co-product: 3,040.00 lbs/yr.
Source: Newmont Mining Corporation - Gold Quarry: AQOP AP1041-0793; MOPTC AP1041-2219								
System Description: Mill 6 Static Separator (Double Rotator Air Pre-Heater: S2.120/TU4.001)								
Hg	3,427,926.00	tpy	0.000278	lbs/hr	2.1298	7,661	0.0000	Static Separator emissions factor derived from 2012 M29 stack test.
System Description: CFB North and South Ore Preheaters (S2.126 & S2.129/ TU4.002 & TU4.003)								
Hg	3,587,493.00	tpy	0.010435	lbs/hr	82.8539	7,940	0.0000	Ore Preheater's emissions factor derived from 2012 M29 stack test.

Source: Newmont Mining Corporation - Gold Quarry: AQOP AP1041-0793; MOPTC AP1041-2219 (continued)								
System Description: CFB North and South Ore Roasters (S2.133 & S2.145/TU4.004 & TU4.005)								
Hg	3,587,493.00	tpy	0.000411	lbs/hr	3.2633	7,940	5.4600	Ore Roaster's factor derived from 2012 M29 stack test.
System Description: ROTP North Calcine Quench Circuit (S2.158 & S2.159/TU4.006 - TU4.009)								
Hg	1,526,187.00	tpy	0.005575	lbs/hr	43.9143	7,877	0.0000	North Quench Circuit emissions factor derived from 2012 M29 stack test.
System Description: ROTP South Calcine Quench Circuit (S2.160 & S2.161/TU4.010 - TU4.013)								
Hg	2,061,306.00	tpy	0.001712	lbs/hr	13.5933	7,940	0.0000	South Quench Circuit emissions factor derived from 2012 M29 stack test.
System Description: AARL Carbon Stripping Circuit (Pregnant Tanks: TU4.014 & TU4.015)								
Hg	13,593.50	tpy	0.003836	lbs/hr	31.4322	8,194	0.0000	Pregnant Strip Tanks emissions factor derived from 2012 M29 stack test.
System Description: Refinery Barren Tank & Electro-winning Cells (TU4.016 & TU4.017)								
Hg	40,639,032.00	gals/yr	0.004466	lbs/hr	31.4813	7,049	0.0000	Barren Tank/EW Cells emissions factor derived from 2012 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.041 - S2.046/TU4.018 - TU4.023)								
Hg	21.90	tpy	0.004894	lbs/hr	5.7162	1,168	0.8400	Retort Circuit emissions factor derived from 2011 M29 stack test. Units were decommissioned in May, 2012.
System Description: Electric Refinery Induction Furnaces (S2.047 - S2.049/TU4.024 - TU4.026)								
Hg	72.20	tpy	0.004167	lbs/hr	2.5752	618	0.0000	Induction Furnace emissions factor derived from 2012 M29 stack test.
System Description: Carbon Kiln #1 (Zadra Building) Scrubber Stack (S2.056/TU4.027)								
Hg	6,984.00	tpy	0.001215	lbs/hr	8.7043	7,164	0.0100	Kiln Scrubber Stack emissions factor derived from 2012 M29 stack test.
System Description: Carbon Kiln #2 (AARL Building) Scrubber Stack (S2.058?TU4.028)								
Hg	6,323.00	tpy	0.000637	lbs/hr	4.1679	6,543	0.0400	Kiln Scrubber Stack emissions factor derived from 2012 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.225/TU4.029)								
Hg	20.60	tpy	0.0000167	lbs/hr	0.0022	1,340	0.7100	Retort Circuit emissions factor derived from 2012 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.226/TU4.030)								
Hg	9.90	tpy	0.0001337	lbs/hr	0.0894	669	0.3400	Retort Circuit emissions factor derived from 2012 M29 stack test.
System Description: Refinery Mercury Retort Circuit (S2.227/TU4.031)								
Hg	10.00	tpy	0.00001193	lbs/hr	0.0077	643	0.2100	Retort Circuit emissions factor derived from 2012 M29 stack test.
System Description: Assay Laboratory, Met Laboratory & Integrated Laboratory								
Hg					1.9230		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total:	310.6937	2.7200	CY2006 Co-product: 5,440 lbs/yr.
					CY2007 Facility Total:	504.4204	6.1600	CY2007 Co-product: 12,320 lbs/yr.
					CY2008 Facility Total:	422.4137	6.7700	CY2008 Co-product: 13,540 lbs/yr.
					CY2009 Facility Total:	280.6857	5.3900	CY2009 Co-product: 10,780 lbs/yr.
					CY2010 Facility Total:	397.1321	5.7000	CY2010 Co-product: 11,400 lbs/yr.
					CY2011 Facility Total:	222.6075	3.8500	CY2011 Co-product: 7,700.00 lbs/yr.
					CY2012 Facility Total:	231.8539	7.6100	CY2012 Co-product: 15,220.00 lbs/yr.
Source: Newmont Mining Corporation - Midas Operations: AQOP AP1041-0766.01; MOPTC AP1041-2253								
System Description: Refinery Furnace #1 (S2.035/TU4.001)								
Hg	62.00	tpy	0.008728	lbs/hr	4.4775	513	0.0000	Furnace #1 emissions factor derived from 2012 M29 stack test.
System Description: Refinery Furnace #2 (S2.036/TU4.002)								
Hg	89.40	tpy	0.01519	lbs/hr	10.4507	688	0.0000	Furnace #2 emissions factor derived from 2012 M29 stack test.
System Description: Retort A (S2.037/TU4.003)								
Hg	98.00	tpy	0.00000458	lbs/hr	0.0127	2,778	0.0100	Retort A emissions factor derived from 2012 M29 stack test.
System Description: Retort B (S2.038/TU4.004)								
Hg	31.59	tpy	0.00298	lbs/hr	5.0302	1,688	0.0000	Retort B emissions factor derived from 2012 M29 stack test.
System Description: Retort C (S2.052/TU4.005)								
Hg	23.89	tpy	0.0000382	lbs/hr	0.0285	745	0.0000	Retort C emissions factor derived from 2012 M29 stack test.
System Description: Assay Laboratory								
Hg				lbs/hr	1.8326		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total:	17.1801	0.0000	CY2006 Co-product: 0.00 lbs/yr.
					CY2007 Facility Total:	4.2457	0.0000	CY2007 Co-product: 0.00 lbs/yr.
					CY2008 Facility Total:	41.3420	0.0000	CY2008 Co-product: 0.00 lbs/yr.
					CY2009 Facility Total:	6.4395	0.0000	CY2009 Co-product: 0.00 lbs/yr.
					CY2010 Facility Total:	14.2333	0.0000	CY2010 Co-product: 0.00 lbs/yr.
					CY2011 Facility Total:	32.0815	0.0099	CY2011 Co-product: 19.87 lbs/yr.
					CY2012 Facility Total:	21.8322	0.0100	CY2012 Co-product: 10.40 lbs/yr.
Source: Barrick, Bald Mountain Mine - Huntington Valley: AQOP AP1041-1362; MOPTC AP1041-2246								
System Description: Propane Fired Carbon Regeneration Kiln (S2.001/TU4.001)								
Hg		tpy		lbs/hr	0.0000		0.0000	Carbon Kiln decommissioned in May, 2012 and did not operate in 2012.
System Description: Propane Fired Mercury Retort (S2.002/TU4.002)								
Hg	0.40	tpy	0.00000395	lbs/hr	0.0002	48	0.0000	Retort decommissioned in May, 2012. Emissions factor derived from 2011 M29 stack test.

Source: Barrick, Bald Mountain Mine - Huntington Valley: AQOP AP1041-1362; MOPTC AP1041-2246 (continued)								
System Description: Propane Fired Bullion Furnace (S2.003/TU4.003)								
Hg	0.30	tpy	0.0000829	lbs/hr	0.0001	7	0.0000	Bullion Furnace decommissioned in May, 2012. Emissions factor derived from 2011 M29 stack test.
System Description: Electro-winning Circuit (IA1.024/TU4.004) and Barren Strip Solution Tank (TU4.005)								
Hg		gals/yr		lbs/hr	0.0000		0.0000	EW Circuit decommissioned in May, 2012 and did not operate in 2012.
System Description: Assay Laboratory								
Hg					3.1462		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Review.
			CY2006 Facility Total:	204.3025			2.9400	CY2006 Co-product: 5,880 lbs/yr.
			CY2007 Facility Total:	57.4138			2.2750	CY2007 Co-product: 4,550 lbs/yr.
			CY2008 Facility Total:	278.3220			2.6000	CY2008 Co-product: 5,200 lbs/yr.
			CY2009 Facility Total:	5.8995			1.5600	CY2009 Co-product: 3,120 lbs/yr.
			CY2010 Facility Total:	7.8188			1.4300	CY2010 Co-product: 2,860 lbs/yr.
			CY2011 Facility Total:	3.2198			1.6100	CY2011 Co-product: 3,220.00 lbs/yr.
			CY2012 Facility Total:	3.1464			0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Kennecott Rawhide Mining Company - Denton-Rawhide Mine: AQOP AP1041-1116.02; MOPTC AP1041-2245								
System Description: Carbon Regeneration Kiln (S2.001/TU4.001)								
Hg	265.20	tpy	4.49E-07	lbs/hr	0.0035	7,800	0.0000	Carbon Kiln emissions factor derived from 2012 M29 stack test.
System Description: Electro-winning Circuit (IA3.007/TU4.002)								
Hg	Not Reported	gals/yr	0.00000387	lbs/hr	0.0147	3,802	0.0000	Electro-winning Cells emissions factor derived from 2012 M29 stack test.
System Description: Refinery Induction Furnace (S2.004/TU4.003)								
Hg	67.70	tpy	0.00818	lbs/hr	6.9661	852	0.0000	Refinery Furnace emissions factor derived from 2012 M29 stack test.
System Description: System 1 - Mercury Retort (System 2 - S2.002)								
Hg	37.16	tpy	0.0000187	lbs/hr	0.1191	6,369	0.0249	Retort emissions factor derived from 2012 M29 stack test.
System Description: Fire Assay Laboratory								
Hg					0.0142		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	351.5928			0.0621	CY2006 Co-product: 124.20 lbs/yr.
			CY2007 Facility Total:	39.5645			0.0276	CY2007 Co-product: 55.20 lbs/yr.
			CY2008 Facility Total:	13.0908			0.0262	CY2008 Co-product: 52.40 lbs/yr.
			CY2009 Facility Total:	12.0029			0.0258	CY2009 Co-product: 51.60 lbs/yr.
			CY2010 Facility Total:	37.6433			0.0079	CY2010 Co-product: 15.80 lbs/yr.
			CY2011 Facility Total:	78.5131			0.0230	CY2011 Co-product: 46.00 lbs/yr.
			CY2012 Facility Total:	7.1176			0.0249	CY2012 Co-product: 49.80 lbs/yr.
Source: Hycroft Resources & Development, Inc. - Crofoot/Lewis Project: AQOP AP1041-0334.02; MOPTC AP1041-2255								
System Description: Mercury Retort #1 (TU4.001)								
Hg	Not Reported	tpy	0.00000147	lbs/hr	0.0115	7,833	34.0200	Retort emissions factor derived from 2012 M29 stack test.
System Description: Smelting Furnace (TU4.002)								
Hg	Not Reported	tpy	0.000009	lbs/hr	0.0254	2,823	0.0000	Refinery Furnace emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retort #2 (TU4.003)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort did not operate in 2012.
System Description: Assay Laboratory								
Hg					4.4415		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	0.0000			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	0.0000			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	0.0000			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	4.5299			0.8000	CY2009 Co-product: 1,600 lbs/yr.
			CY2010 Facility Total:	4.5219			4.2000	CY2010 Co-product: 8,400 lbs/yr.
			CY2011 Facility Total:	4.5242			23.0700	CY2011 Co-product: 46,147 lbs/yr.
			CY2012 Facility Total:	4.4784			34.0200	CY2012 Co-product: 68,047.00 lbs/yr.
Source: Antler Peak Gold, Inc. (formerly Metallic Ventures, Inc.): AQOP AP1041-1202; MOPTC AP1041-2248								
System Description: Carbon Regeneration Kiln, Solution Tanks & Electro-winning Circuit (TU4.001 - TU4.003 & TU4.006)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System did not operate in 2012, under construction.
System Description: Mercury Retorts, Solution Tanks & Electro-winning Circuit (TU4.002 - TU4.006)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System did not operate in 2012, under construction.
System Description: Dore Furnace, Solution Tanks & Electro-winning Circuit (TU4.002, TU4.003, TU4.006 & TU4.007)								
Hg	10.87	tpy	0.003	lbs/hr	3.6990	1,233	0.0000	Source failed to test in 2012, used reported flow and default permit limit to calculate emissions.

Source: Antler Peak Gold, Inc. (formerly Metallic Ventures, Inc.): AQOP AP1041-1202; MOPTC AP1041-2248 (continued)								
System Description: Assay Laboratory								
Hg					0.0076		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total:	0.0000	0.0000	CY2006 Co-product: 0.00 lbs/yr.
					CY2007 Facility Total:	0.0000	0.0000	CY2007 Co-product: 0.00 lbs/yr.
					CY2008 Facility Total:	0.2838	0.0000	CY2008 Co-product: 0.00 lbs/yr.
					CY2009 Facility Total:	0.2838	0.0000	CY2009 Co-product: 0.00 lbs/yr.
					CY2010 Facility Total:	0.0222	0.0000	CY2010 Co-product: 0.00 lbs/yr.
					CY2011 Facility Total:	0.0022	0.0000	CY2011 Co-product: 0.00 lbs/yr.
					CY2012 Facility Total:	3.7066	0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Coeur D'Alene Mining Corporation - Coeur Rochester Mine: AQOP AP1044-0063.02; MOPTC AP1041-2242								
System Description: Refinery Furnace (TU4.001)								
Hg	119.00	tpy	0.00366	lbs/hr	1.3725	375	0.0000	Refinery Furnace emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retorts (TU4.002 & TU4.003)								
Hg	206.00	tpy	5.13E-07	lbs/hr	0.0022	4,212	20.4000	Retort emissions factor derived from 2012 M29 stack test.
System Description: Assay Laboratory								
Hg					1.8805		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total:	2.8872	16.1000	CY2006 Co-product: 32,200 lbs/yr.
					CY2007 Facility Total:	137.0958	15.4000	CY2007 Co-product: 30,800 lbs/yr.
					CY2008 Facility Total:	9.9144	15.6000	CY2008 Co-product: 31,200 lbs/yr.
					CY2009 Facility Total:	4.4097	10.7000	CY2009 Co-product: 21,400 lbs/yr.
					CY2010 Facility Total:	2.6426	12.3000	CY2010 Co-product: 24,600 lbs/yr.
					CY2011 Facility Total:	3.3523	11.2000	CY2011 Co-product: 22,400 lbs/yr.
					CY2012 Facility Total:	3.2552	20.4000	CY2012 Co-product: 40,800.00 lbs/yr.
Source: Newmont Mining Corporation - Lone Tree Mine: AQOP AP1041-0059; MOPTC AP1041-2251								
System Description: Electro-winning Cells (East Stack)								
Hg		gals/yr		lbs/hr	0.0000		0.0000	EW Cells were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Electro-winning Cells (West Stack)								
Hg		gals/yr		lbs/hr	0.0000		0.0000	EW Cells were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Electro-winning Cells (Scavenger Stack)								
Hg		gals/yr		lbs/hr	0.0000		0.0000	EW Cells were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Pregnant and Barren Solution Tanks								
Hg		tpy - carbon		lbs/hr	0.0000		0.0000	P/B Tanks were decommissioned throughout 2012. Lone Tree remains in temporary closure, but is securing permits to recommence operations.
System Description: Sample Room, Fire Assay Room, Wet Laboratory, LECO Laboratory, Met Laboratory								
Hg					1.8788		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total:	622.1013	0.0000	CY2006 Co-product: 0.00 lbs/yr.
					CY2007 Facility Total:	148.0964	0.0000	CY2007 Co-product: 0.00 lbs/yr.
					CY2008 Facility Total:	67.1251	0.0000	CY2008 Co-product: 0.00 lbs/yr.
					CY2009 Facility Total:	7.2136	0.0000	CY2009 Co-product: 0.00 lbs/yr.
					CY2010 Facility Total:	3.0212	0.0000	CY2010 Co-product: 0.00 lbs/yr.
					CY2011 Facility Total:	1.8788	0.0000	CY2011 Co-product: 0.00 lbs/yr.
					CY2012 Facility Total:	1.8788	0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Barrick Cortez, Inc. - Cortez Hills and Pipeline Projects: AQOP AP1041-2141; MOPTC AP1041-2220								
System Description: Refinery Induction Furnace #1 (S2.002/TU4.003)								
Hg	39.60	tpy	0.00000318	lbs/hr	0.0009	281	0.0000	Refinery Furnace emissions factor derived from 2012 M29 stack test.
System Description: Refinery Induction Furnace #2 (S2.003/TU4.004)								
Hg	1.70	tpy	0.0000223	lbs/hr	0.0004	19	0.0000	Refinery Furnace emissions factor derived from 2012 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #1 (S2.007/TU4.005)								
Hg	447.30	tpy	0.000015	lbs/hr	0.0136	910	0.0000	Carbon Kiln #1 emissions factor derived from 2012 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #2 (S2.008/TU4.006)								
Hg	25.50	tpy	0.0000196	lbs/hr	0.0010	50	0.0000	Carbon Kiln #2 emissions factor derived from 2012 M29 stack test.
System Description: East Electro-winning Cells (IA1.096/TU4.001)								
Hg	Not Reported	gals/yr	0.0000611	lbs/hr	0.5352	8,760	0.0000	EW Cells emissions factor derived from 2012 M29 stack test.
System Description: West Electro-winning Cells (IA1.097/TU4.002)								
Hg	Not Reported	gals/yr	0.0000131	lbs/hr	0.1148	8,760	0.0000	EW Cells emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retorts (TU4.010 & TU4.011)								
Hg	49.00	tpy	0.00001274	lbs/hr	0.0498	3,910	1.2100	Retort emissions factor derived from 2012 M29 stack test with both retorts operating. Retort #1 operated 2,084 hrs. & Retort #2 operated 1,826 hrs.

Source: Barrick Cortez, Inc. - Cortez Hills and Pipeline Projects: AQOP AP1041-2141; MOPTC AP1041-2220 (continued)									
System Description: Pregnant and Barren Strip Solution Tanks (TU4.008 & TU4.009)									
Hg	Not Reported	gals/yr	0.000188	lbs/hr	1.6469	8,760	0.0000	Preg./Barren Tanks emissions factor derived from 2012 M29 stack test.	
System Description: Assay Laboratory (Analytical Lab Building), Met Laboratory, Strip Circuit Area (Mill Building), Refinery Gold Sludge Drying Oven, Fire Assay Fusion Furnaces									
Hg					1.8530		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
			CY2006 Facility Total:		166.7059		0.1200	CY2006 Co-product: 240 lbs/yr.	
			CY2007 Facility Total:		208.0466		0.3200	CY2007 Co-product: 640 lbs/yr.	
			CY2008 Facility Total:		75.8638		0.0000	CY2008 Co-product: 0.00 lbs/yr.	
			CY2009 Facility Total:		1.3905		0.0170	CY2009 Co-product: 34 lbs/yr.	
			CY2010 Facility Total:		5.1862		0.0000	CY2010 Co-product: 0.00 lbs/yr.	
			CY2011 Facility Total:		5.1815		0.7200	CY2011 Co-product: 1,441 lbs/yr.	
			CY2012 Facility Total:		4.2156		1.2100	CY2012 Co-product: 2,412.00 lbs/yr.	
Source: Florida Canyon Mining, Inc. - Florida Canyon Mine: AQOP AP1041-0106.02; MOPTC AP1041-2256									
System Description: Mercurt Retort (S2.003/TU4.004)									
Hg	13.81	tpy	0.00000131	lbs/hr	0.0016	1,216	0.6300	Retort emissions factor derived from 2012 M29 stack test.	
System Description: Mercurt Retort (S2.004/TU4.005)									
Hg	Not Reported	tpy	4.86E-07	lbs/hr	0.0000	0	0.0000	All Retort emissions reporetd under TU4.004. No breakout provided.	
System Description: Electro-winning Cell A (TU4.002)									
Hg	Not Reported	tpy	0.00038	lbs/hr	3.3288	8,760	0.0000	Electro-winning Cells emissions factor derived from 2012 M29 stack test.	
System Description: Electro-winning Cell B (TU4.003)									
Hg	Not Reported	tpy	0.0000475	lbs/hr	0.4161	8,760	0.0000	Electro-winning Cells emissions factor derived from 2012 M29 stack test.	
System Description: Carbon Regeneration Kiln (S2.007/TU4.008)									
Hg	Not Reported	tpy	0.000419	lbs/hr	0.7860	1,876	0.0000	Carbon Kiln emissions factor derived from 2012 M29 stack test.	
System Description: Dore Furnace (S2.005/TU4.001)									
Hg	0.57	tpy	0.000251	lbs/hr	0.0816	325	0.0000	Dore Furnace emissions factor derived from 2012 M29 stack test.	
System Description: Pregnant Tank (TU4.006)									
Hg		hrs/yr		lbs/hr	0.0000		0.0000	No emissions factor available - closed circuit.	
System Description: Barren Tank (TU4.007)									
Hg		hrs/yr		lbs/hr	0.0000		0.0000	No emissions factor available - closed circuit.	
System Description: Assay Laboratory									
Hg					3.6307		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
			CY2006 Facility Total:		440.7382		0.2264	CY2006 Co-product: 452.80 lbs/yr.	
			CY2007 Facility Total:		19.0000		0.0072	CY2007 Co-product: 14.40 lbs/yr.	
			CY2008 Facility Total:		162.3117		0.2875	CY2008 Co-product: 575 lbs/yr.	
			CY2009 Facility Total:		49.6118		0.8120	CY2009 Co-product: 1,624 lbs/yr.	
			CY2010 Facility Total:		111.8133		0.3090	CY2010 Co-product: 618 lbs/yr.	
			CY2011 Facility Total:		51.7290		1.2700	CY2011 Co-product: 2,538 lbs/yr. (1,829.00 "liquid"; 709.00 sludge)	
			CY2012 Facility Total:		8.2449		0.6300	CY2012 Co-product: 1,252.00 lbs/yr. (892.00 "liquid"; 360.00 sludge)	
Source: Round Mountain Gold Corporation - Smoky Valley Common Operation: AQOP AP1041-0444.01; MOPTC AP1041-2250									
System Description: RMG Carbon Reactivation Kiln (S2.121/TU4.001)									
Hg	3,095.00	tpy	0.00000413	lbs/hr	0.0362	8,760	0.0000	Carbon Kiln emissions factor derived from average of 2012 M29 stack tests.	
System Description: RMG Pregnant Strip Solution Tank (TU4.002: Shares a common stack with S2.121/TU4.001)									
Hg	40.00	gals/min		lbs/hr	0.0000	8,760	0.0000	The Pregnant Strip Solution Tank and both Barren Strip Solution Tanks are vented to a common stack with the Carbon Kiln. Therefore, the emissions factor is for all four units running simultaneously and emissions are calculated using the highest hours of operations value of the four units. The Carbon Kiln actually operated 8,544 hours for the year with the remaining units operating 8,760 each.	
System Description: RMG Barren Strip Solution Tank #1 (TU4.003: Shares a common stack with S2.121/TU4.001)									
Hg	40.00	gals/min		lbs/hr	0.0000	8,760	0.0000		
System Description: RMG Barren Strip Solution Tank #2 (TU4.004: Shares a common stack with S2.121/TU4.001)									
Hg	40.00	gals/min		lbs/hr	0.0000	8,760	0.0000		
System Description: RMG Electric Induction Furnace (S2.130/TU4.005)									
Hg	47.00	tpy	0.00131	lbs/hr	0.8829	674	0.0000	Furnace emissions factor derived from average of 2012 M29 stack tests.	
System Description: GH Carbon Reactivation Kiln (S2.157/TU4.006)									
Hg	0.00	tpy		lbs/hr	0.0000	0	0.0000	Carbon Kiln is under construction, did not operate in 2012.	
System Description: GH Electro-winning Circuit & Pregnant/Barren Strip Solution Tanks (S2.158 - S2.160/TU4.007 - TU4.009)									
Hg	2,688.00	gals/yr	0.00223	lbs/hr	0.1427	64	0.0000	Interim Hg emissions limit. First stack test scheduled for March, 2013.	
System Description: GH Mercury Retort (S2.161/TU4.010)									
Hg	0.01	tpy	0.0000101	lbs/hr	0.0002	23	0.0000	Interim Hg emissions limit. First stack test scheduled for March, 2013.	
System Description: GH Smelting Furnace (S2.162/TU4.011)									
Hg	0.00	tpy	0.00307	lbs/hr	0.0061	2	0.0000	Interim Hg emissions limit. First stack test scheduled for March, 2013.	

Source: Round Mountain Gold Corporation - Smoky Valley Common Operation: AQOP AP1041-0444.01; MOPTC AP1041-2250 (continued)								
System Description: RMG Refinery Electro-winning Vent & Ovens, Assay Laboratory Ovens.								
Hg					3.1278		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
							0.0085 CY2006 Co-product: 17 lbs/yr.	
							0.0000 CY2007 Co-product: 0.00 lbs/yr.	
							0.0000 CY2008 Co-product: 0.00 lbs/yr.	
							0.0000 CY2009 Co-product: 0.00 lbs/yr.	
							0.0000 CY2010 Co-product: 0.00 lbs/yr.	
							0.0000 CY2011 Co-product: 0.00 lbs/yr.	
							0.0000 CY2012 Co-product: 0.00 lbs/yr.	
Source: Homestake Mining Company of California - Ruby Hill Mine: AQOP AP1041-0713.01; MOPTC AP1041-2252								
System Description: Electric Carbon Regeneration Kiln (S2.019/TU4.001)								
Hg		tpy		lbs/hr	0.0000		0.0000 Carbon Kiln was decommissioned 04/25/11 and did not operate in 2012.	
System Description: Electric Mercury Retort (S2.022/TU4.003)								
Hg		tpy		lbs/hr	0.0000		0.0000 Retort was decommissioned 04/25/11 and did not operate in 2012.	
System Description: Electric Refinery Induction Furnace (S2.013/TU4.002)								
Hg		tpy		lbs/hr	0.0000		0.0000 Furnace was decommissioned 04/25/11 and did not operate in 2012.	
System Description: Electro-winning Cells 1 & 2 (IA1.005/TU4.004) and Pregnant and Barren Strip Solution Tanks (TU4.005)								
Hg		gals/yr		lbs/hr	0.0000		0.0000 EW Circuit was decommissioned 04/25/11 and did not operate in 2012.	
System Description: Assay Laboratory								
Hg					1.3818		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
							0.5000 CY2006 Co-product: 1,000 lbs/yr.	
							0.3800 CY2007 Co-product: 760 lbs/yr.	
							0.2400 CY2008 Co-product: 480 lbs/yr.	
							0.1762 CY2009 Co-product: 352.40 lbs/yr.	
							0.0000 CY2010 Co-product: 0.00 lbs/yr.	
							0.0495 CY2011 Co-product: 99 lbs/yr.	
							0.0000 CY2012 Co-product: 0.00 lbs/yr.	
Source: Marigold Mining Company - Marigold Mine: AQOP AP1041-0158.02; MOPTC AP1041-2254								
System Description: Carbon Regeneration Kiln (S2.013A/TU4.001)								
Hg	950.70	tpy	2.64E-07	lbs/hr	0.0010	3,728	0.0000 Carbon Kiln emissions factor derived from 2012 M29 stack test.	
System Description: Mercury Retort (S2.014/TU4.002)								
Hg	8.30	tpy	0.0000045	lbs/hr	0.0058	1,284	1.4600 Retort emissions factor derived from 2012 M29 stack test.	
System Description: Tilting Crucible Furnace (S2.015/TU4.003)								
Hg	5.70	tpy	0.00017	lbs/hr	0.0321	189	0.0000 Furnace emissions factor derived from 2012 M29 stack test.	
System Description: Electro-winning Circuit (TU4.004)								
Hg	44,210.00	tpy	0.0000045	lbs/hr			Electro-winning Cells emissions factor derived from 2012 M29 stack test. Pregnant and Barren Strip Solution Tanks vented to a common stack with Electro-winning Cells, therefore, emissions factor is for all three units.	
System Description: Pregnant Strip Solution Tank (TU4.005)								
Hg		tpy		lbs/hr				
System Description: Barren Strip Solution Tank (TU4.006)								
Hg		tpy		lbs/hr	0.0281	6,253	0.0000	
System Description: Assay Laboratory								
Hg					2.0489		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
							0.1675 CY2006 Co-product: 335 lbs/yr.	
							0.2450 CY2007 Co-product: 490 lbs/yr.	
							0.5690 CY2008 Co-product: 1,138 lbs/yr.	
							0.8160 CY2009 Co-product: 1,632 lbs/yr.	
							1.0330 CY2010 Co-product: 2,066 lbs/yr.	
							1.0500 CY2011 Co-product: 2,100 lbs/yr.	
							1.4600 CY2012 Co-product: 2,927.00 lbs/yr.	
Source: Borealis Mining Company: AQOP AP1041-2125; MOPTC AP1041-2228								
System Description: Deep Bed Carbon Scrubber: Carbon Regeneration Kiln								
Hg					0.0000		0.0000 System not yet constructed in 2012.	
System Description: Deep Bed Carbon Scrubber: Mercury Retort								
Hg	Not Reported		0.00171	lb/hr	0.6789	397	0.0000 Stack test invalidated, used default limit to estimate emissions for 2012.	
System Description: Deep Bed Carbon Scrubber: Smelting Furnace								
Hg	Not Reported		0.00086	lb/hr	0.1269	148	0.0000 Stack test invalidated, used default limit to estimate emissions for 2012.	

Source: Borealis Mining Company: AQOP AP1041-2125; MOPTC AP1041-2228 (continued)								
System Description: Deep Bed Carbon Scrubber: Solutions Circuit								
Hg	468,000.00	gal/yr	0.00171	lb/hr	11.2398	6,573	0.0000	Stack test invalidated, used default limit to estimate emissions for 2012.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.0000		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		0.0000		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		0.0000		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		0.0000		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		12.0456		0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Barrick Turquoise Ridge, Inc. - Getchell Mine: AQOP AP1041-0292.01; MOPTC AP1041-2249								
System Description: Assay/Met Laboratory								
Hg					4.9462		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		10.6752		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		4.9660		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		4.9462		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.9462		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		4.9462		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.9462		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.9462		0.0000	CY2012 Co-product: x.00 lbs/yr.
Source: Noble Technologies Corp.: AQOP AP1041-2634; MOPTC AP1041-2701								
System Description: Furnaces (3 Drying, 1 Smelting)								
Hg					4.0026		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2010 Facility Total:		4.0026		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.0026		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.0026		0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Tonkin Springs, LLC: AQOP AP1041-0482.03; MOPTC AP1041-2726								
System Description: Assay Laboratory (2 Grieve Drying Ovens)								
Hg					4.9200		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2010 Facility Total:		4.9200		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.9200		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.9200		0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Comstock Mining, LLC (formerly Plum Mining Company, LLC): AQOP AP1041-2761; MOPTC AP1041-2690								
System Description: Mercury Retort (S2.XXX/TU4.001)								
Hg	10.00	tpy	0.0000409	lbs/hr	0.0121	296	0.0000	No Hg testing conducted in 2012, used 07/17/2013 test result.
System Description: Refinery Furnace (S2.XXX/TU4.002)								
Hg	4.69	tpy	0.000337	lbs/hr	0.2325	690	0.0000	No Hg testing conducted in 2012, used 07/17/2013 test result.
System Description: Assay Laboratory (12 Thermal Units)								
Hg					0.0309		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2011 Facility Total:		0.0309		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		0.2755		0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Mineral Ridge Gold, LLC: AQOP AP1041-2733; MOPTC AP1041-2222								
System Description: Assay Laboratory (9 Thermal Units)								
Hg					2.1256		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2011 Facility Total:		2.1256		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		2.1256		0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Aurum Joint Venture, LLC: AQOP AP1041-2511; MOPTC AP1041-2638								
System Description: Assay Laboratory								
Hg					2.7982		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2009 Facility Total:		2.7962		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		2.7962		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		2.7982		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		2.7982		0.0000	CY2012 Co-product: 0.00 lbs/yr.

Source: Manhattan Mining Company - Goldwedge Mine: AQOP AP1041-1457; MOPTC AP1041-2303								
System Description: Assay Laboratory & Dore Smelting Furnace								
Hg					4.4661		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		4.1040		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		4.1040		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.1040		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		4.1040		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.1040		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.4661		0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Newmont Mining Corporation - Phoenix Mine: AQOP AP1041-0220.02; MOPTC AP1041-2247								
System Description: Electric Carbon Regeneration Kiln (S2.002/TU4.001)								
Hg	2,523.00	tpy	0.0000012	lbs/hr	0.0050	4,205	0.0000	Carbon Kiln emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retort (S2.014/TU4.002)								
Hg	29.90	tpy	0.00000001	lbs/hr	0.0000	2,658	0.0000	Retort emissions factor derived from 2012 M29 stack test.
System Description: Pregnant & Barren Strip Solution Tanks								
Hg					0.0940		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
System Description: Electro-winning Cells								
Hg					0.2733		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		2.3061		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.4579		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		1.3102		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		0.3835		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		0.3749		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		0.3724		0.0000	CY2012 Co-product: 0.00 lbs/yr.
Source: Barrick Goldstrike Mines, Inc.: AQOP AP1041-0739.01; MOPTC AP1041-2221								
System Description: North Roaster Mill Circuit #1 Air Pre-Heater and Dry Grinding Process (S2.204 & S2.205.01 - S2.205.12/TU4.001)								
Hg	2,704,775.00	tpy	0.000859	lbs/hr	6.719957	7,823	0.0000	Mill Circuit #1 emissions factor derived from 2012 M29 stack tests.
System Description: South Roaster Mill Circuit #2 Air Pre-Heater and Dry Grinding Process (S2.206 & S2.207.01 - S2.207.12/TU4.002)								
Hg	2,489,283.00	tpy	0.000729	lbs/hr	5.775867	7,923	0.0000	Mill Circuit #2 emissions factor derived from 2012 M29 stack test.
System Description: Roasters #1 & #2 (S2.209.1 & S2.209.2/TU4.003 & TU4.004)								
Hg	5,685,190.00	tpy	0.0167	lbs/hr	132.4644	7,932	0.0000	Roaster Circuit emissions factor derived from 2012 M29 stack test. Testing was conducted during dual Roaster operations. Annual hours operated is the average of individual Roaster operations. Roaster #1 operated 7,917 hrs/yr, Roaster #2 operated 7,946 hrs/yr.
System Description: North Roaster Circuit #1 Quenching Process (S2.210/TU4.005)								
Hg	3,035,462.00	tpy	0.00198	lbs/hr	15.67566	7,917	0.0000	Quench Circuit #1 emissions factor derived from 2012 M29 stack test.
System Description: South Roaster Circuit #2 Quenching Process (S2.211/TU4.006)								
Hg	2,649,728.00	tpy	0.000786	lbs/hr	6.245556	7,946	0.0000	Quench Circuit #2 emissions factor derived from 2012 M29 stack test.
System Description: Analytical Assay Laboratory (S2.051/TU4.007)								
Hg	41.00	tpy	0.000129	lbs/hr	1.1331	8,784	0.0000	Assay Lab emissions factor derived from 2012 M29 stack test.
System Description: Carbon Reactivation Kiln (S2.004.1/TU4.008)								
Hg	3,445.00	tpy	0.0000464	lbs/hr	0.1688	3,639	0.0000	Carbon Kiln emissions factor derived from 2012 M29 stack test.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit A (TU4.009 & TU4.011)								
Hg	Not Reported	gals/yr	0.0000341	lbs/hr	0.2995	8,784	0.0000	Preg./Barren Tanks A emissions factor derived from 2012 M29 stack test.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit B (TU4.010 & TU4.012)								
Hg	Not Reported	gals/yr	0.0000431	lbs/hr	0.3786	8,784	0.0000	Preg./Barren Tanks B emissions factor derived from 2012 M29 stack test.
System Description: Autoclave #1 (S2.015/TU4.013)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Acidic Operation Autoclave #1 did not operate in acidic mode during 2012.
System Description: Autoclave #1 (S2.015/TU4.013)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Alkaline Operation Autoclave #1 did not operate in alkaline mode during 2012.
System Description: Autoclaves #2 & 3 (S2.016 & S2.017/TU4.014 & TU4.015)								
Hg	1,246,847.00	tpy	0.00477	lbs/hr	20.8735	4,376	0.0000	Acidic Operation Autoclaves #2 & 3 emissions factor derived from 2012 M29 stack test. Testing was conducted during dual Autoclave operation and only during acidic operations mode. Annual hours operated is the average of individual Autoclave operations. Autoclave #2 (TU4.014) operated 5,136 hrs/yr; Autoclave #3 (TU4.015) operated 3,616 hrs/yr.
System Description: Autoclaves #2 & 3 (S2.016 & S2.017/TU4.014 & TU4.015)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Alkaline Operation Autoclaves #2 & 3 did not operate in alkaline mode during 2012.

Source: Barrick Goldstrike Mines, Inc.: AQOP AP1041-0739.01; MOPTC AP1041-2221 (continued)								
System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018)						Acidic Operation		
Hg	120,630.00	tpy	0.000135	lbs/hr	0.0479	355	0.0000	Autoclaves #4 - 6 emissions factor derived from 2012 M29 stack test. Testing was conducted during simultaneous operations and only during alkaline operations mode. Annual hours operated is the average of individual Autoclave operations during acidic mode. Autoclave #4 operated 223 hours/yr; #5 operated 376 hours/yr; and #6 operated 467 hrs/yr.
System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018)						Alkaline Operation		
Hg	2,049,231.00	tpy	0.000135	lbs/hr	0.7586	5,619	0.0000	Autoclaves #4 - 6 emissions factor derived from 2012 M29 stack test. Testing was conducted during simultaneous operations and only during alkaline operations mode. Annual hours operated is the average of individual Autoclave operations during alkaline mode. Autoclave #4 operated 5,113 hrs/yr; #5 operated 5,965 hrs/yr; and #6 operated 5,779 hrs/yr.
System Description: Mercury Retorts #1 (S2.009/TU4.019)								
Hg	37.00	tpy	0.00132	lbs/hr	3.0294	2,295	0.0000	Retort #1 emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retorts #2 (S2.010/TU4.020)								
Hg	24.00	tpy	0.000275	lbs/hr	0.6097	2,217	0.0000	Retort#2 emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retorts #3 (S2.011/TU4.021)								
Hg	34.00	tpy	0.0014	lbs/hr	3.2914	2,351	0.0000	Retort #3 emissions factor derived from 2012 M29 stack test.
System Description: Mercury Retort #4 (S2.341/TU4.025)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort #4 did not operate in 2012.
System Description: Mercury Retorts #'s 1 - 4 (Cumulative Co-product)								
Hg							44.4100	Cumulative co-product for all four mercury retorts.
System Description: East & West Refinery Furnaces & Electro-winning Cells combined vented through a common carbon filter and stack (S2.013 & S2.014/TU4.022 & TU4.023)								
Hg	86.00	tpy	0.0241	lbs/hr	12.3392	512	0.0000	Furnaces's/EW Cells emissions factor derived from 2012 M29 stack test. Testing was conducted during dual Furnace and EW Cell operations. Annual hours operated is the average of individual Furnace operations. East Furnace (TU4.022) operated 509 hrs/yr; West Furnace (TU4.023) operated 515 hrs/yr.
System Description: Electro-winning Cells only (TU4.024)								
Hg	Not Reported	gals/yr	0.0168	lbs/hr	120.4224	7,168	0.0000	EW Cells emissions factor derived from 2012 M29 stack test while the Furnaces were not operating. Total EW Cell operating hours were 7,680 hrs/yr. Combined Furnace/EW Cell operating hours of 512 hrs/yr. were subtracted from total hours operated to arrive at 7,168 hours of EW Cell operations only.
System Description: Elution Circuit Process Tanks (S2.333.1 - S2.333.8/TU4.026 - TU4.029)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	Elution Circuit Process Tanks did not operate in 2012.
System Description: Resin-In-Leach (RIL) Electro-winning Circuit (S2.342.1 - S2.342.3/TU4.030 - TU4.032)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	RIL Electro-winning Circuit did not operate in 2012.
System Description: Assay, Mill, Mill Met, Autoclave, Autoclave Met and Roaster Pumphouse Laboratories, Strip Circuit Area and Ore Fines Fee System.								
Hg	0.00				4.7500		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					616.7650		98.5500	CY2006 Facility Total: 616.7650 lbs/yr. Co-product: 197,100 lbs/yr.
					708.6590		58.6300	CY2007 Facility Total: 708.6590 lbs/yr. Co-product: 117,260 lbs/yr.
					166.0557		87.3300	CY2008 Facility Total: 166.0557 lbs/yr. Co-product: 134,660 lbs/yr.
					369.7831		61.8730	CY2009 Facility Total: 369.7831 lbs/yr. Co-product: 123,746 lbs/yr.
					266.9336		60.1080	CY2010 Facility Total: 266.9336 lbs/yr. Co-product: 120,216 lbs/yr.
					630.5519		59.9200	CY2011 Facility Total: 630.5519 lbs/yr. Co-product: 119,840 lbs/yr.
					334.9836		44.4100	CY2012 Facility Total: 334.9836 lbs/yr. Co-product: 88,820.00 lbs/yr. (x.00 lbs. - calomel; x.00 lbs - elemental).

CY 2012 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
1,393.42		115.95
CY 2012 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.		
Co-product: 231,900 lbs/yr		

Note that the total value is lower than actual industry-wide emissions due to a few thermal units which were unable to test in the reporting year and the absence of 2009 test data for Barrick Goldstrike's autoclaves under alkaline operating conditions. See 2009 Report for details.



CY 2010 Cumulative Totals			CY 2011 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Co-product: 213,540 lbs/yr
Process Emissions (lbs/yr)		Co-Product (tpy)	
1,607.96		106.77	
CY 2010 Cumulative Totals			CY 2010 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Co-product: 203,180 lbs/yr
Process Emissions (lbs/yr)		Co-Product (tpy)	
1,134.15		101.59	
CY 2009 Cumulative Totals			CY 2009 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. In general, testing went much better in 2009 than in 2008 with far fewer testing irregularities or instances where test results were invalidated. Co-product: 180,360 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
1,336.46		90.18	
CY 2008 Cumulative Totals			CY 2008 process emissions were largely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Some facilities had entire testing events, or in some cases just one or more runs of a test event, invalidated due to irregularities in testing protocol, poor sample handling procedures or laboratory errors. Yukon-Nevada Corporation - Jeritt Canyon Mine (formerly Queenstake Resources) did not test in 2008 due to the temporary NDEP ordered shutdown of the facility. Co-product: 205,860 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
3,165.90		102.93	
CY 2007 Cumulative Totals			CY 2007 process emissions were largely derived using one consistent FRM testing methodology (Method 29) with scattered M101A and OHM results used in lieu of M29 due to test schedule conflicts/logistics issues. Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Co-product: 195,360 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
4,764.52		97.68	
CY 2006 Cumulative Totals			CY 2006 process emissions and co-product values were accepted "as submitted" due to variability in testing methodology, emission calculation methods and/or the lack of current FRM test results. Co-product: 266,520 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
4,468.15		133.26	